

6.0 HISTORY OF LOCAL EARTHQUAKES

In the course of physical investigation of the Rancho San Andres Castro Adobe it became increasingly clear that the building had suffered damage in earthquakes other than those of 1989 and 1906. The presence of two early retrofit measures, the wooden wall tie embedded in the north wall and the government anchors in the east and west walls, which are shown in the early photographs of the building were a clue. However, it became apparent during the physical examination that these measures were prompted by serious, not superficial earthquake damage.

Therefore, late in the preparation of this Historic Structure Report, primary research was undertaken to ascertain what events occurred when. It was clear that some of the earthquake damage occurred and was repaired or dealt with during the period of interpretation when the Castros owned and occupied the dwelling from the nature of the repairs or lack thereof.

The research methodology followed was to locate references to all recorded earthquakes in the immediate area in the Descriptive Catalog of Earthquakes of the Pacific Coast of the United States 1769-1928 published as a Bulletin of the Seismological Society of America in January, 1939. Then, the local Watsonville newspapers of those dates were read to retrieve references to the local effects of the earthquakes in the Pajaro Valley.

6.1 1857 FT. TEJON EARTHQUAKE

The earliest known earthquake that may have affected the Castro Adobe occurred in 1857 called the Ft. Tejon earthquake. It, or its aftermath, damaged the Santa Cruz Mission church severely, but there was no newspaper coverage of Watsonville at the time so we cannot know anything specific.

6.2 FEBRUARY 26, 1864 EARTHQUAKE

The earthquake on Friday morning at 5:4 A.M. was called "one of the severest shocks of earthquake ever felt in this valley" (**Pajaro Times**, February 27, 1864). It was later estimated as a Rossi-Forel scale (similar to the Modified Mercalli scale used today) of VI at Santa Cruz based on damage there. The shock was very heavy in Santa Cruz, San Jose, and damaged adobes in Monterey.

6.3 OCTOBER 8, 1865 EARTHQUAKE

The earthquake of this date and its aftermath was great in the Pajaro Valley. It caused significant damage in San Francisco, San Jose, Santa Cruz and elsewhere, but not Monterey. The Pajaro river rose dramatically. "In the town and throughout the valley many chimneys were thrown to the ground, and nearly every house suffered by cracked plastering, etc. which of course will add materially to the above mentioned total" (**Pajaro Times**, October 14, 1865). It is

not unlikely that some of the earthquake damage such as the 4" wide and 18" deep crack in the north wall of Room 202 happened at this time. This crack is white washed and unrepaired. It may well have precipitated the wooden tie beam spanning present day Rooms 201 and 202. Following this event, the county experienced after shocks for weeks (**Pajaro Times**, October 21, 1865)

6.4 AUGUST 24, 1868 EARTHQUAKE

This earthquake was experienced as a smart shock at Watsonville (**Pajaronian**, August 27, 1868). It was possibly a fore shock of the great earthquake of 1868.

6.5 OCTOBER 21, 1868 EARTHQUAKE

This earthquake destroyed the old Mission church of Mission San Jose. More than 20 people died in San Francisco and damage was widespread in San Jose, San Leandro, Santa Cruz (**Pajaronian**, October 29, 1868). An estimated 3 million dollars or more in damage was done. This earthquake is also a likely candidate to have produced the damage described in 6.2 above. This earthquake occurred during the Castro family occupation of the adobe.

6.6 MARCH 30, 1883 EARTHQUAKE

This earthquake was followed by a series of eight others and was described as "almost as heavy as that of 1868 (**Pajaronian**, April 5, 1883). "The shocks have been felt more severely in Hollister, Watsonville and Gilroy than elsewhere." Since this is the year in which the Hansens purchased the Castro Adobe, these earthquakes (as there were a number of them) may have contributed to their decision to install government anchors.

6.7 APRIL 14, 1889 EARTHQUAKE

This was a sharp shock between three and four o'clock on Monday (**Pajaronian**, April 18, 1889).

6.8 APRIL 24, 1890 EARTHQUAKE

This earthquake was felt very hard in the Green Valley and Corralitos areas of the Pajaro Valley which is near the Buena Vista area where the adobe was located. In nearby San Juan, the brick convent school was severely damaged leading to demolition. In Watsonville proper, it was not very strongly felt (**Pajaronian**, May 1, 1890). This event definitely could have persuaded the Hansens to install the anchors.

6.9 JUNE 20, 1897 EARTHQUAKE

This shock was not felt very severely in Watsonville leading the paper to believe that Watsonville was “only on the edge of the “shake-up” Sunday’ (**Pajaronian**, June 24, 1897).

6.10 APRIL 30, 1899 EARTHQUAKE

“The shock was severest in Green Valley district, with the center of it along the ridge from the Corralitos creek to the Green Valley schoolhouse...” (**Pajaronian**, May 4, 1899). It was described as one of the severest earthquake experiences by the paper.

6.11 APRIL 18, 1906 EARTHQUAKE

This one needs no introduction, nor does the aftershock of April 20. The Amesti adobe on Rancho Corralitos was “almost completely ruined” as was the adobe on the south side of the Pajaro River. The south end of the Castro Adobe suffered a severe crack at the corner visible in many of the historic photographs taken in the 1930s. As a result of this earthquake the Hansens built the board and batten cottage south of the Castro Adobe and moved out upon its completion. We suspect that they made some repairs to the windows on the east side before leaving.

6.12 CONCLUSIONS

Research terminated with the 1906 earthquake, but we understand that Mr. and Mrs. Holtzclaw built a new home across Old Adobe Road because of her fear of them. It is likely that despite their erection of buttresses at the south end, that earthquakes in the mid twentieth century frightened them.